

REMARKS

Claims 1-54 are pending in the application. Claim 2 has been cancelled by this amendment. Therefore, claims 1 and 3-54 are at issue.

Independent claims 1 and 37 have been amended to recite that the first and second water-absorbing resins, independently, are neutralized greater than 25% to 50%, by weight. Support for this amendment can be found in originally filed and now-cancelled claim 2. Independent claim 26 has been amended to recite a blend of multicomponent superabsorbent particles and particles of a third water-absorbing resin. This amendment clarifies that claims 26-34 recite an admixture of discrete particles. Support for the amendment to claim 26 can be found at pages 96-103 of the specification. Claim 35 has been amended to correct a typographical error by changing the pendency of claim 35 to claim 26.

Claims 1-54 stand rejected under the judicially created doctrine of obviousness-type double patenting over U.S. Patent No. 6,072,101 ('101). In view of the timely filed terminal disclaimer filed concurrently with this amendment, it is submitted that this rejection has been overcome and should be withdrawn.

Claims 1-25 and 35-54 stand rejected under 35 U.S.C. §102(b), and alternatively under 35 U.S.C. §103, as being unpatentable over U.S. Patent No. 6,072,101 ('101). In view of the amendments to the claims, and for the reasons set forth below, it is submitted that this rejection is in error and should be withdrawn.

The '101 patent is directed to multicomponent superabsorbent gel particles containing, in the same

particle, an acidic resin neutralized 0% to about 25%, by weight, and a basic resin neutralized 0% to about 25%, by weight (see claim 1 of the '101 patent, for example). The '101 patent contains numerous examples wherein the percent neutralization of both the acidic resin and the basic is 0% (i.e., DN=0). See Examples 1-16 and Tables 1-6 of the '101 patent. The '101 patent also discloses an acidic resin having a DN=0 to DN=20. See Table 1 (SAP-2¹⁰) and column 5, lines 9-11.

The present claims recite a degree of neutralization of the first resin and the second resin of greater than 25% to 50%, by weight, which is higher than the neutralization range disclosed in the '101 patent. The teachings of the '101 patent are limited to a 0% to about 25%, by weight, neutralization of each resin. The '101 patent contains no suggestion that would motivate a person skilled in the art to increase the degree of neutralization to greater than 25% or up to 50%, with any reasonable expectation providing multicomponent superabsorbent particles that absorb and retain large amounts of an aqueous fluid. The examiner is directed to pages 75-78 and Table 8 of the specification that demonstrate the unexpectedly high fluid absorption and retention properties of the presently claimed multicomponent superabsorbent particles. The results are both new and unexpected in view of the teachings and suggestions of the '101 patent.

In summary, for all the reasons set forth above, it is submitted that claims 1, 3-25, and 35-54 are both novel and nonobvious over U.S. Patent No. 6,072,101, and that the rejection of these claims under

35 U.S.C. §102(b), and alternatively under 35 U.S.C. §103, should be withdrawn.

Claims 1-54 again stand rejected under 35 U.S.C. §102(b), and alternatively under 35 U.S.C. §103, over the '101 patent. It is assumed that the Office Action contains a typographical error and that this rejection properly should be directed to claims 26-34 and presently amended claims 35 and 36. Accordingly, this response is directed to claims 26-36, and for the reasons set forth below, it is submitted that this rejection is in error and should be withdrawn.

The basis of this rejection of claims 26-36 is that a multicomponent superabsorbent particle of the '101 patent can contain at least one acidic resin and at least one basic resin, and "at least" means more than one. The examiner misunderstands present claims 26-36 which has been clarified by reciting a *blend* of (a) multicomponent particles and (b) particles of a third water-absorbing resin. Claims 26-34 now more clearly claims a mixture of discrete particles of a multicomponent superabsorbent (containing a first resin and a second resin in the same particle) and discrete particles of a third water-absorbing resin. The *third* resin is *not* a component of the multicomponent superabsorbent particles, but is particles that are discrete from the multicomponent superabsorbent particles.

The '101 patent absolutely fails to teach or suggest a blend of multicomponent superabsorbent particles and particles of a third superabsorbent resin, as presently recited in claims 26-36. The '101 patent is directly *solely* to multicomponent particles having

an acidic and a basic resin, independently, neutralized 0% to about 25%, by weight.

The '101 patent not only fails to teach or suggest multicomponent particles having a first and a second resin component neutralized greater than 25% to 50%, but also fails to teach or suggest admixing particles of a multicomponent superabsorbent with other superabsorbent particles. Furthermore, the '101 patent fails to provide any motivation for a person skilled in the art, after reading the '101 patent, to arrive at the superabsorbent material recited in claims 26-36 with any reasonable expectation of achieving the high absorbency and retention properties demonstrated by the presently claimed superabsorbent material of claims 26-36, as illustrated in the specification (see pages 96-103).

Accordingly, it is submitted that the rejection of claims 26-34 as being anticipated by, and alternatively obvious over, the '101 patent under 35 U.S.C. §102(b) or 35 U.S.C. §103 should be withdrawn.

The following are additional rejections issued under 35 U.S.C. §102(b) and alternatively 35 U.S.C. §103:

Claims 1, 3, 4, 6, 7, 9-14, 16-18, and 23-25 over Bolto et al., *J. Polymer Sci.*, (1976) (Bolto et al. (I));

Claims 1, 3-14, 16-20, and 23-25 over Bolto et al., *J. Polymer Sci.*, (1979) (Bolto et al. (II)); and

Claims 1, 6-18, and 21-54 over WO 95/22358 (WO '358).

Each of these rejections has been overcome in view of the amendments to claims 1 and 37. In partic-

ular, the features of claim 2 have been incorporated into each of claims 1 and 37. Claim 2 was not included in the above rejections, and, accordingly, these rejections have been overcome and should be withdrawn.

In addition, the pending claims also are patentable over the cited references for the following reasons.

With respect to Bolto et al. (I), this reference does *not* teach multicomponent *superabsorbent* particles. Bolto et al. (I) is directed to *ion-exchange* resins. The Bolto et al. (I) reference fails to teach or suggest water-absorbent particles, but, to the contrary, teaches ion exchange resins that *do not* absorb and retain large quantities of aqueous fluids. In particular, triallylamine, after polymerization, does *not* provide a water-absorbing resin. In the present claims, the first resin is lightly crosslinked and the second resin is lightly crosslinked, and each resin is capable of absorbing and retaining an aqueous fluid. The crosslinking in the present claims, and referred to by the examiner in the rejection, is different from the crosslinking disclosed in Bolto et al. (I). The crosslinking recited in claims 12 and 13 is *surface* crosslinking, i.e., an additional crosslinking step restricted to the general area of the surfaces of water-absorbent particles. Surface crosslinking improves the fluid absorption and retention properties of the particles. The examiner is confusing surface crosslinking with the internal crosslinking disclosed in Bolto et al. (I). Bolto et al. (I) is absolutely silent with respect to surface crosslinking, and, furthermore, surface crosslinking would be avoided

because the resins of Bolto et al. (I) are not designed to absorb and retain aqueous fluids, but to exchange ions in an aqueous fluid.

Bolto et al. (II) suffers from the same deficiencies as Bolto et al. (I). This reference also is directed to ion-exchange resins, not superabsorbent resins. Water absorption is disclosed only for the matrix resin (e.g., a cellulosic) to permit ion exchange by the crosslinked resin. The crosslinked resins are referred to only for salt uptake (i.e., ion exchange). Like Bolto et al. (I), Bolto et al. (II) is silent with respect to surface crosslinking.

WO '358, contrary to the examiner's contention, does not teach or suggest multicomponent superabsorbent particles, or the blend recited in claim 26. WO '358 merely teaches a blend of *discrete* superabsorbent polymer particles. See pages 13-16 of WO '358 disclosing absorbent gelling particles, including page 16, lines 16-19, stating that a *single* polymer is preferred, but mixtures can be used. WO '385 is absolutely silent with respect to multicomponent particles having a first and a second water-absorbing resin in the *same* particle, or a blend of multicomponent particles and particles of a third water-absorbing resin. Similarly, the "absorbent modification polymer" of WO '358 is present as discrete particles, and *not* as a component of a multicomponent superabsorbent particle.

In summary, it is submitted that claims 1 and 3-54 are in a form for allowance. An early and favorable action on the merits is respectfully requested.

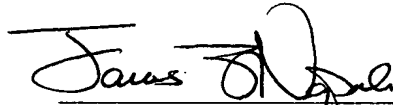
Should the examiner wish to discuss the foregoing, or any matter of form in an effort to advance

this application toward allowance, the examiner is urged to telephone the undersigned at the indicated number.

Respectfully submitted,

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